

Program	Program NUCLEU PN 16-25.02.04
Project title (ENG):	Bioaccumulation potential assessment of heavy metals in aquatic organisms and highlighting of stress biomarkers
Project title (RO):	Evaluarea potentialului de bioacumulare a metalelor grele in organisme acvatice si evidentierea biomarkerilor de stres
Duration	2016-2017
Team Leader	Senior Researcher 3 rd degree PhD Biochemist Stefania Gheorghe Assistant Researcher PhD Biologist Cristina Gligor
Summary (short description)	The Project consists of <i>in vitro</i> concentrations selection studies of heavy metals for laboratory testing that will imitate <i>in vivo</i> conditions of surface waters in Romania, highlighting the metals bioaccumulation potential in selected biological model (estimation of bioaccumulation / bioconcentration factors), detecting biomarkers at molecular and structural/cellular level, highlighting studied metals bioaccumulation potential of living organisms - case study in a selected area.
Summary (short description) RO	Proiectul consta in studii <i>in vitro</i> de alegere a concentratiilor de metale grele pentru experimentare care sa imite conditiile <i>in vivo</i> din apele de suprafata din Romania, evidentierea potentialului de bioacumulare a metalelor in modelul biologic selectat (estimarea factorilor de bioacumulare/bioconcentrare), detectarea biomarkerilor la nivel molecular si structural/celular, evidentierea potentialului de bioacumulare a metalelor studiate in organisme vii - studiu de caz intr-o zona selectata.
Dissemination of results	
Book, book chapters	S. Gheorghe, C. Stoica, G. G.Vasile, M. Nita-Lazar, E. Stanescu, I. Lucaciu, <i>Metals toxic effects in aquatic ecosystems: modulators of water quality</i> , Book Chapter 4, In: Water Quality, InTech, Hlanganani Tutu(Ed.), ISBN 978-953-51-2882-3, DOI: 10.5772/65744, 2017.
Full-paper ISI	Stefania Gheorghe, Gabriela Geanina Vasile, Cristina Gligor, Irina Eugenia Lucaciu, Mihai Nita Lazar, <i>Metallic elements (Cu, Zn, Ni and Mn) toxicity effects determination on a Fresh Water Fish Cyprinus Carpio (Common Carp) laboratory acclimatized</i> , Revista de Chimie (Bucuresti), 68(8), 2017, pp. 1711-1715